

DOCUMENT RESUME

ED 054 630

EM 009 217

AUTHOR

Hoijer, Bjorn

TITLE

The Extent and Orientation of Broadcasting Media Consumption; Application to the Bank of Sweden Tercentenary Fund for Support of Research Project. Swedish Broadcasting Corp., Stockholm.

INSTITUTION

PUB DATE

70

NOTE

23p.

EDRS PRICE

MF-\$0.65 HC-\$3.29

DESCRIPTORS

Audiences; Broadcast Industry; Radio; Research Methodology; *Television; *Television Research; *Television Surveys; *Television Viewing; Viewing Time

IDENTIFIERS

*Sweden

ABSTRACT

A long-range Swedish research project is attempting to describe the role of broadcast media in society as seen by both communicator and receiver. The first section of the study, now taking place, is examining television audiences to determine what they watch, why they watch it, what they think of what they see, and what kind of audience, in terms of social status, interests, social activity level, and linguistic and cultural frames of reference, tunes in what programs. A later part of the study will analyze the resultant data in terms of policy-making, planning, and production. Interviewers, who are located throughout the country, survey a representative sample daily by telephone and send the results directly by telex to a central computer for storage and analysis. The data is examined by the computer to establish "normal" consumption patterns. (JK)

ED054630

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

THE EXTENT AND ORIENTATION OF
BROADCASTING MEDIA CONSUMPTION

Application to the Bank of Sweden
Tercentenary Fund for support of
Research Project.

Björn Höijer

EM009217

SVERIGES RADIO

REQUEST FOR GRANT

Application is hereby made for a grant of 152.174 kronor from the Bank of Sweden Tercentenary Fund to carry out a project hereinafter described under the title, "The Extent and Orientation of Broadcasting Media Consumption".

Stockholm, March 13, 1970.

(signed)

Björn Höijer
Project Director

I hereby certify that services and resources are available to carry out the research covered by this application.

Stockholm, March 13, 1970.

(signed)

Ola Melén
Head of Audience and Programme Research
Department at Sveriges Radio

APPLICATION TO THE BANK OF SWEDEN TRICENTENARY FUND FOR
SUPPORT OF RESEARCH PROJECT

TITLE OF PROJECT: The Extent and Orientation of Broadcasting Media
Consumption

INSTITUTION: Audience and Programme Research Department
Sveriges Radio
105 10 Stockholm

FIDUCIARY INSTITUTION: Sveriges Radio
105 10 Stockholm

PROJECT DIRECTOR: Björn Höijer, Ph.L.
Audience and Programme Research Department
Sveriges Radio
105 10 Stockholm
Telephone: 08/67 56 26 (Wednesdays)
018/12 03 20 (other office hours)
018/37 07 69 (home)

PROJECT DURATION: The application relates to two working years as
from the date the grant is approved.

ESTIMATED COSTS: A total of 152.174 Swedish kronor, whereof 96.602
kronor in the first year and 55.572 kronor in the
second year.

SCIENTIFIC ANALYSIS OF THE RESEARCH PROJECT

Summary

The project contemplates research over a two-year period within an important field of mass communications.

The technique of gathering information about broadcasting media consumption has been considerably improved of late. As a result the research carried on by the Audience and Programme Research Department of Sveriges Radio has gained access to a rich and extensive body of empirical data. This has laid a basis for systematic investigation of the role played by broadcasting media in the community at large.

The present project seeks to provide the foundation for a general study of this kind. Considering that media consumption is undoubtedly a changeable phenomenon, new demands will constantly be imposed on studies that vary in their aim and direction. Our primary purpose with this project is to establish the frame of reference that is necessary to enable systematic study of this changeability. This will be done as follows:

- a) Statistical treatment of the existing amount of information will give us an answer to the question: "Given a certain output of information, what is the amount of consumption that may be expected?"
- b) Closer analysis of relevant attributes in the receivers will give us an answer to the question: "What is it that characterizes groups of individuals with different consumption patterns?"
- c) Extended analysis of media consumption will give us an answer to the question: "What particularized structure enters into the perception of output and how can the difference of perception be related to sociological and psychological attributes in the receivers?"

Preface

Applied research and basic research are closely interwoven. At the Audience and Programme Research Department (SR/PUB) we strive to design all projects so that they will have maximum theoretical relevance and at the same time be capable of underpinning practical decisions on concrete problems. The assignments we perform for clients within Sveriges Radio are financed under the programme budget prescribed for radio and television, which does not accommodate any earmarked appropriation for mass communications research.

Where certain problem areas are concerned, however, theoretical and methodological development work is required on a fairly large scale before the application level is reached. Within our own specialized field we have no more than limited scope for applying know-how from other research fields, which compels us to rely in great measure on our own efforts. (At present there are only two institutions in Sweden that continuously pursue mass communications research: SR/PUB and the Economic Research Institute at the Stockholm School of Economics). We think it very important to have facilities for systematic scientific work, but as matters now stand we do not have the economic means which that requires. Further, we think ourselves capable of releasing manpower and technical resources towards the pursuit of sophisticated research in mass communications, provided only that the economic opportunities present themselves. Not only that, but the services we render to SR's programme units give us immediate access to a unique body of empirical data.

"The coming decade must imply, especially in Sweden, a breakthrough for the impartial, interdisciplinary mass media research on a high level. This is a pre-requisite if radio and TV are, in the long run, to make the maximum use of their positive potential and if they are to protect themselves against the pressure of opinion which enlists the aid of pretended negative effects with the intention of restricting the freedom of movement of these media."

Olof Rydbeck: "Perspectives on the Eve of the 1970s", in Structures and Programming for the 1970, Stockholm 1969, p. 19.

Objects of the study

The broadcasting media are the major communicators of information and entertainment. At present 91 percent of the Swedish population have access to TV in their homes. 55 percent have access to both channels and that proportion is growing fast. 97 percent have radio receivers. Both media thereby reach all sections of the community and constitute a dominant element in the leisure activities of many people. Research in the consumption habits of audiences and in the societal role of broadcasting media is therefore of general and public interest.

Since September 1, 1969, the Audience and Programme Research Department of Sveriges Radio has been making daily surveys to measure the size and composition of the TV audience. The data which these daily TV surveys accumulate offer a unique opportunity for penetrating analysis of consumption patterns, at the same time that they provide a basis for studying the functions of radio and television.

1. Background

The present project can be viewed as one part of a long-ranging research plan that aims to describe the role of broadcasting media in the society as seen both by the communicator and the receiver. As regards the receiving side, the object is to analyze broadcasting media functions with reference to behaviour variables (consumption), attitude variables (perceptions of output) and background variables (general social status, direction of interests, social activity level, linguistic and cultural frames of reference). On the communicating side, it is planned to analyze goals at different levels (policy-making, planning and production). As an adjunct to the analyses of goals and functions, a content analysis of the programme output will be introduced. The long-term plan may be illustrated schematically as follows:

RECEIVER	MESSAGE	COMMUNICATOR
Behaviour variables	(De facto content analysis, see p. 8)	Target group analysis (production and planning levels)
Perception variables	(Evaluative content analysis, see p. 9)	Programme-related goal analysis (production level)
Background variables (in broad sense - see above)	Content analysis of programme output as per prevailing methods	Output-related goal analysis (planning and policy levels)

The continuous lines in this diagram define different stages of the research plan.

Four detached research stages are tentatively planned:

- I Extent and orientation of broadcasting media consumption
- II Broadcasting media functions, proceeding from the results of stage I
- III Content analysis of the programme output
- IV Communicator study with emphasis on goal analysis

The results from these four stages will show:

- a) the extent to which broadcasting media fulfil the functions that different audiences think they ought to fulfil;
- b) what functions are associated with media, with programme types, with individual programme series;
- c) the extent to which goals for the output are achieved;
- d) Whether agreement exists between goals and functions, and in which areas any discrepancies may be found.

It seems natural for several reasons to commence a research plan of this type by mapping out the extent and pattern of consumption. One reason is that we have direct access to most of the data which are needed. Another reason is that this mapping-out is necessary if we want to have a stable underbase for the coming analysis of the functions that broadcasting media perform for the various media-relevant population groups.

In recent years a growing proportion of mass communications research has focused on the "uses and gratification approach", which starts out from the question, "What do individuals do with mass media?".

By definition the uses and gratification approach is tied to behaviour, but to the best of our knowledge no farther-reaching systematic attempt to follow and analyze the consumption of broadcasting media as here envisioned has been made anywhere in the world, even though many countries have been regularly recording viewing and listening figures for decades. This state of affairs can be explained in part by a shortage of resources and the absence of relevant methods of data processing.

2. Goals

2.1 To determine the normal level

By and large the consumption of media has shown a relatively high degree of stability. If, say, we study TV audience size from Monday through Thursday in an ordinary week, the curves turn out to be rather similar, with a tendency to taper off as the evening progresses. A comparison of

the weekend viewing patterns from week to week likewise discloses great similarities.

The observed stability of consumption also seems to hold for the new media situation which arose when two TV channels went into operation. However, that is based on subjective impressions from comparisons between similar output situations, and even though the similarities are striking variances from stability will often occur. It therefore becomes appropriate to regard the consumption measure as a statistical variable, so that the average or expected media consumption as well as individual variances from this can be determined for any one time period. This can be done by accumulating the sequence of observations in forecasting model, which can be seen here as a method of smoothing out temporary fluctuations.

A forecasting model built upon the daily TV surveys data is intended to provide a continuous and systematic description of media consumption. Because it imparts a fixed reference the forecasting model also makes it possible to follow up those long-term changes in audience sizes that may be considered to reflect an altered role function for television (and radio) in the society.

It cannot be stressed strongly enough how fundamentally important this fixed reference is for the development of methods to analyze media consumption. We maintain that absolute assessments of consumption by groups of individuals can be misleading and sometimes lead to sheer misinterpretations. What should be subjected to analysis instead are the variances from the "normal level". However, that presupposes knowledge of the expected consumption; with the method here discussed, which can be realized thanks to the constant collection of factual data, the reference can be determined.

The variances which lend themselves to analysis may be said to fall into two discrete classes: stationary and transient.

Stationary comparison: Media consumption is sometimes spoken of as a shallow pastime that "impoverishes the soul". When critics make these assertions they often cite absolute estimates of audience size for single programmes. But as already indicated that is a dubious way of using the information and we find it urgent to facilitate analyses in the form of comparisons with what the expected consumption should have been, having regard to type of programme, time of broadcast, day of the week, and so on.

We shall then obtain an objective basis for estimating the consumption on any one occasion. Obviously, the proposed factual analysis does not in any way permit us to pass upon the effect of a particular variance.

Transient comparison: Statements about the change of media consumption are of more frequent occurrence than stationary comparisons. Naturally, it is very important to know if, say, the consumption of publicly oriented

information is increasing or decreasing, but making a correct estimate becomes a hazardous business if one lacks a well-grounded data base. Such a base can be obtained by natural means from the forecasting model, which of course at every moment of time contains a weighted summary of the material collected to date (weighted in such a way as to assign relatively higher weights to the most recent data). Thus when we compare the forecast values for two different moments we directly find out whether any transient effects are operating and, if so, what they are.

We accordingly maintain that it is necessary to begin by building up a fixed reference that will permit meaningful analyses of media consumption in its various aspects. This will be done with the forecasting method that is proposed herein.

2.2 To map out consumption patterns

The forecasting model is meant to describe systematically the total consumption, but within this framework it is likely that use of the medium will vary considerably from one social group to another. The ways in which receivers expose themselves to television or radio and in which they pick and choose greatly depend on how they construe the functions of the medium.¹⁾ Behaviour on the receiving side may therefore be said to bear a selective character.

Starting out from the assumption of selective behaviour by receivers, we intend (1) to divide the receivers into categories which represent identical or similar consumption patterns; and (2) to divide the programmes into categories which are determined by these consumption patterns (and not by conventional taxonomic criteria) - de facto content analysis.

Each receiver category can presumably be identified in terms of its special way of utilizing the broadcast output. By the same token the data accumulated from the daily TV surveys will also permit programmes to be grouped according to the patterns of consumption behaviour.

The foregoing may also be expressed as follows: We intend to

- a) divide the programmes and receivers (actually, the whole Swedish adult population) into categories that are relevant to media consumption;
- b) determine the criteria of a classification as above and describe the categories in sociological and psychological terms.

To be sure, routine procedures are being applied even now to audience classification with the help of background variables such as sex, age, education and place of residence, but this approach is much too superficial and limited to allow causal interpretations.

1) See e.g. Lundberg, D. & Hultén, O.: Individen och massmedia (The individual and mass media), Stockholm 1968.

2.3 To analyze programme perception

Along what dimensions do the receivers, when put into relevant categories as described above, perceive and react to programmes? This is another aspect that we want to investigate.

Studies of audience size and composition at different times can never exhaustively answer the question of why individuals seek out certain programmes or types of programmes.

In order to arrive at a satisfactory description of these causes, it is necessary to penetrate individual perceptions of programme material. It appears very likely that the conventional classification of programmes made by the communication is matched by a perceptual classification that differs in part from the former. (Evaluative content analysis)

Different people perceive the same content in different ways. Such individual differences of programme perception can presumably be related to character traits of the individual that can be explained in terms of social psychology and personality psychology.

Receiver reactions may be more discriminatingly described by means of semantic-type attitude scales derived from factor analysis, a method that is reported in an earlier study.²⁾ It was found in this study that the variations in 56 semantic scales obtained from in-depth interviews could be assigned to the variation in only four "fundamental" factors. These factors have been tentatively labelled as informative, dynamic, involving and evaluative. The assignment of average points to each programme for the different factors has made it possible to set up reaction profiles, according to which the investigated programmes have been characterized by means of four variable values, one for each factor.

How a multidimensional measure of this type functions in the natural receiving situation is untested up to now. We think it important to analyze the nature and depth of programme perception and therefore intend to try out a form of multidimensional measure that can enhance understanding of the reasons why individuals select programme material.

In the light of the foregoing, the goals of the project may be summed up as follows:

to provide means for a continuous and systematic description of total consumption; to divide the receivers and programmes into categories that are relevant to this consumption; and to determine the criteria of the dimensions along which the receivers perceive and react to the programme output.

²⁾ Nilsson Staffan: Factor analysis of programme ratings using semantic technique. Sveriges Radio/PUB, Project No. 46/68 (mimeo).

Practical and scientific importance of the project

The studies that enter into this project will specify and reify certain important primary data for further analysis of the role that broadcasting media play in the society. Once we know the receiver categories who are relevant for media consumption purposes as well as the dimensions along which the programmes are perceived, we shall have the tools for analytical approaches of the kind set forth by the schema below:

1. RECEIVERS

1.1 What receiver groups expose themselves to the same programmes?

- characteristics, psychological and social
- cognitive frame of reference
- habits and interests

1.2 What receiver groups expose themselves at the same time?

- characteristics, psychological and social
- cognitive frame of reference
- habits and interests

2. PROGRAMMES

2.1 What programme groups attract the same receivers?

- content analysis, de jure (as per logical concepts) and de facto (as per receivers' concepts)
- comprehensibility level

2.2 What programme groups are perceived in the same way?

- content analysis, de jure and de facto
- comprehensibility level

This fundamental and "global" exploration of the media audience's psychological needs and social behaviour - attitudes, knowledge, interests, living habits, linguistic skills etc - is necessary to explain media behaviour and should be done in connection with changes in total consumption that are continuously "followed up" with the aid of the forecasting model.

At the same time this analysis of the receiver-and-message side forms a natural adjunct to studies on the communicator side which seek to describe the goals of media activity as this is articulated at different levels.

The results that are gained, apart from their usefulness as important primary data for further mass communications research of a more theoretical bent, should also render valuable support to the practical work of programming.

Once data on the nature of any one programme are in hand, it will be possible to forecast the total consumption, predict audience composition and preferences for every point of time during the transmission day, and give a picture of the probable reactions to the programme. Information of this kind has tremendous value. At the same time these data will offer a facility for evaluating the outcome of the goals for broadcasting media that have been given their basic formulation in the Agreement between Sveriges Radio and the Swedish Government.

RESEARCH METHODS

1. Character of the basic material

1.1 Television

On September 1, 1969, the Audience and Programme Research Department of Sveriges Radio started its daily TV surveys under a brand new kind of field organization. The new organization builds upon the telex transmission both of questionnaires and interview responses. It is designed to meet exacting demands of speed and to provide prompt and reliable day-to-day information about the size and composition of audiences for different programmes and how these audiences rate the programmes.

The studied population embraces all people in Sweden between the ages of 15 and 80. The Central Bureau of Statistics selects respondents by means of a standard sampling programme (STURV), which extracts random samples from the tape register that covers all persons domiciled in Sweden sorted in fiscal order (RTBS). The sample thus drawn is then tape-merged with the register of total population sorted in personal identification number order (RTB), from which are taken the name, address, domicile data and name of family head for every sampled individual. The sample is then allocated to sampling packages with about 200 individuals in each package.

Members of the field organization are recruited, trained and led by the Field Section of the Audience and Programme Research Department. The interviews are made by telephone. Telephone numbers can be obtained for more than 90 percent of the sample. Telegrams are despatched to the remaining respondents urging them to get in touch with SR's interviewers. The use of telegrams represents an alternative to in-home interviews. The response frequency obtained from "telegram respondents" is equally high as that which comes from visiting people in their homes. The samples used are so-called national samples. To minimize the telephone costs the interviewers, numbering a hundred or so, operate all over the country and stand by way of 13 field districts in direct telex contact with a central computer, which controls and processes the survey data "on line" with the reports coming in from the interviewers. The telex transmits not only the results from the interviews but also the questionnaires sent by the Field Section to the interviewers. This means that even programme changes made without advance notice late on a broadcast evening will be included in the daily TV surveys on the following day.

Practical and economic reasons argue that information should be obtained about several days of televiewing once contacts with the respondents are well established. For every respondent the day on which he is to be interviewed is determined in advance (interview date = day 0). He will then be interviewed about the TV programmes he saw during days -3, -2 and -1. If he is not available on day 0, the interviewer will be in a position to call back on days +1 and +2. If the respondent is still unavailable, he will be regarded as a case of nonresponse.

These three-day interviewing periods have accordingly been scheduled so that they overlap one another as illustrated in the diagram below:

Interviewing days

Mon	Tues	Wed	Thur	Fri	Sat	Sun	Mon	Tues
-3	-2	-1	0	+1	+2			
	-3	-2	-1	0	+1	+2		
		-3	-2	-1	0	+1	+2	
			-3	-2	-1	0	+1	+2

researched days = -3, -2, -1

interviewing days = 0, +1, +2

Since every questionnaire covers a sampling package of 200 individuals, this means that a total of 600 persons will be interviewed in regard to each single day's TV programmes.

Interviewing data consist primarily of particulars as to whether different TV programmes were seen or not together with ratings of the programmes seen.

Ratings are made by having the respondents score the programme on a scale of points ranging from 1 to 5. A score of 1 defines the programme as "very bad", while 5 points define it as "very good". A rating mean that ranges from 1 to 5 points is then entered in the tables.

The tables set forth the results broken down by background variables as follows:

- access to TV (facility for tuning in on both channels)
- sex
- age
- education (elementary school only; higher than elementary but lower than upper secondary; upper secondary, and higher education).
- size of home community (cities of Stockholm and Göteborg - including inner suburbs - and city of Malmö; municipalities with more than 18.000 inhabitants; municipalities with less than 18.000 inhabitants).

In addition to interviewing data, information about every single TV programme is stored in the computer. Listed below are some of the items of programme data:

- transmission time
- name of programme fully spelt out
- channel
- colour or monochrome
- classifications of programme by content and format

Reading in the programme data also permits the formation of certain new summary variables. Common storage of interviewing and programme data in the computer will make it possible to undertake complex machine runs and to accumulate data, say from several programmes, in one series.

1.2 Sound radio

Data for sound radio are not collected with the same regularity; at present 5 - 6 programme weeks are covered annually.

The principles governing data collection are the same as for TV but the samples are larger (400 interviews per day) and the interviewing period is shorter (each respondent is asked about his radio listening during the two days preceding interview).

The results are presented in the same way as reported above for TV. At present, however, the data material contains interviewing data only. No programme data have been read into the computer.

2. The forecasting model

As we have seen, audience size is related to:

1. transmission time
2. day of week
3. programme content

(see p. 6)

In consequence of the adoption of daily TV surveys on a continuous basis, large quantities of data are being accumulated on programmes and audiences. This enables us to make highly detailed analyses of the relation between audience sizes and the aforementioned factors. If the observed stability of audience response can be retrieved, we are in a good position to predict audience size.

Evidence for the predictions is contained in the stored basic material. To start out with we plan to utilize the information in this data volume at degrees of precision specified below:

I	Channel	2 categories	
II	Time data:		
	Day of week (Monday-Thursday, Friday, Saturday, Sunday)	4	"
	Hour (before 1800, 1800-1900, 1900 - 2000, 2000-2100, 2100-2200, after 2200)	6	"
III	Programme classification	7	"
IV	Person data:		
	Age	4	"
	Sex	2	"
	Education	3	"
	Place of residence	3	"

Even though the network defined by this choice of breakdown is very coarse, the number of permutations is very great since the variables are independent of one another and are to be combined multiplicatively. This means that we shall at first have to equate different categories in order to arrive at a number of observations that is large enough to underpin the forecast.

We have chosen a simple model for the forecast, known as exponential

smoothing¹⁾, whose most important property is that one never has to save older data: all that is needed for the new forecast is the old forecast and the new observation.

After some time has elapsed enough data will have accumulated to permit a prediction of the outcome in the form of consumption of the output by different groups. That will give us access to a fixed reference point for all reflections concerning consumption patterns.

When a measure of programme perception has been developed, it will become possible to apply the forecasting model to this field as well. In principle, this involves the same procedure as that described above for audience sizes.

3. Consumption patterns

Proceeding from the assumption that receiver behaviour is selective, we shall try out techniques for (a) dividing the receivers into categories that are characterized by identical or similar consumption patterns; and (b) dividing the programmes into categories that are determined by consumption patterns (and not by conventional taxonomic criteria).

The two methods that will first of all be applied in processing the accumulated size data are (1) factor analysis and (2) hierarchical cluster analysis.

The different steps in factor analysis may be described as follows:

- (i) A number of days are randomly selected from a "normal" transmission period. All programmes in the course of one day are compared in pairs by estimating the number of viewers who have seen both programmes in the same pair and by estimating how many have watched the one programme.
- (ii) Phi coefficients are figured out on the basis of the comparison. The higher the correlation between two programmes, the greater the probability that a person who has watched programme A has also watched programme B.
- (iii) The correlation matrices are factor-analyzed. (Each factor can be said to represent a specific receiver group. If two programmes have high loadings in one factor, it can be said that the same persons tend to watch these programmes.)

Two processing efforts then become applicable: first, an analysis of the viewers who watch programmes with high loadings in the same factor ("What characterizes these receiver groups?"); and second, a content analysis of programmes with high loadings in the same factor ("What do these programmes have in common?").

¹⁾ Brown, R.G.: Smoothing, Forecasting and Prediction. Englewood Cliffs: Prentice Hall, 1962.

Certain experiences of factor analysis are in hand from foreign sources. A Finnish study reports rather promising results from a two-channel situation resembling that in Sweden¹⁾. On the other hand, a British report takes a decidedly more skeptical attitude to the application of factor analysis to size data²⁾. It should be pointed out, however, that the data accumulated for the daily TV surveys at PUB are of a somewhat different character than those mentioned in the foreign reports cited above.

Perhaps more promising than factor analysis is the method of hierarchical cluster analysis that has been developed quite recently³⁾. This method currently allows a categorization of 90 programmes (with provision for an infinite number of programmes at a later stage), which are combined in programme groups having special characteristics. Certain pretests employing this method have already been carried out, with encouraging results that spur towards its further refinement.

In the same way as for factor analysis, the receivers who watch programmes in the same group or "cluster" can be analyzed with reference to characteristics. The programmes that enter into the same "cluster" can be subjected to content analysis (with inputs consisting of the programme data that are read into the computer as a matter of routine).

4. Analysis of programme perception

The study done earlier (see p. 9) was performed as a laboratory experiment in that the subjects were enabled to watch programmes in the studios of Sveriges Radio, a procedure that hamstrings the natural selection of programmes. Moreover, the significance of all laboratory measurements is to make the viewing situation more or less artificial.

In the present study the object is to find out how the applied measuring method functions under natural receiving conditions. A nationally representative sample of 600 persons between the ages of 15 and 80 will be asked to keep a diary for one week on their televiewing, with entries to include ratings of a number of programmes along the same semantic scales as in the earlier study. The programme ratings will be subjected to a new factor analysis to establish whether the factors found earlier are still valid and to devise a programme typology based on the new reaction profiles.

To be able to combine the programmes in groups based on similarities and dissimilarities between the factor profiles, we shall use the same method as in section 3 above, namely hierarchical cluster analysis.

-
- 1) Nurminen, A-M (1969): Choice of Radio and Television Program, Research Reports from the Section for Long Range Planning, The Finnish Broadcasting Company, No. 5/1969.
 - 2) Aske Research Ltd (1967): The factor analytic Search for Programme Types: A comparative evaluation.
 - 3) Johnson, S.C.: Hierarchical clustering schemes. Psychometrika, 1967, 32, 241-254.

After this division of the measured programmes into a number of programme categories, renewed factor analyses will be made of the programme ratings within each programme category. In this way it should be possible to obtain, first, a set of general scales which differentiate between TV programmes in the aggregate, and second, separate sets of specific scales which differentiate within each programme category.

With the aid of the results obtained from these specific scales, the analysis will proceed to find out whether the consumption groups isolated as per section 3 above differ from one another as regards perception of the same programme material.

So that differences of programme perception can be related to social-psychology factors in the receiver, the final part of the project will be carried out as a laboratory study. Hence the programme ratings can be augmented by a number of tests and questionnaires which measure certain intelligence factors, personality traits, interests etc.

P E R S O N A L I A

Project Director:Björn Höijer

born on March 16, 1934, Ph.L. degree in psychology, 1960.

Employed as teacher at the Institute of Psychology, University of Uppsala, 1958-1961.

Operational analyst at the ASEA Department of Applied Mathematics in Västerås, 1961-1964.

Since 1965 research assistant at the Institute of Psychology, University of Uppsala. This appointment and related operating costs are paid for by the Swedish Social Science Research Council.

Since 1968 director of a sub-project, forming part of a project headed by Professor Gunnar Johansson and paid for by the Bank of Sweden Tercentenary Fund, concerned with research in psychological processes.

These two assignments have resulted in the following reports:

Mechanisms of cognitive judgments, Rep. Psychol. Lab., Univer. Uppsala, 1969, No. 67.(a).

On testing metric and nonmetric models of multidimensional similarity. Rep. Psychol. Lab., Univer. Uppsala, 1969, No 68.(b).

On the consistency of similarity judgments. Rep. Psychol. Lab., Univer. Uppsala. 1970. (a)

Isosimilarity contours of twodimensional cognitive judgments. Rep. Psychol. Lab., Univer. Uppsala. 1970. (b)

(These papers enter into my doctoral dissertation published in the spring of 1970.)

Since 1968 consultant to the Audience and Programme Research Department of Sveriges Radio with special emphasis on methodological problems.

My duties as project director will entail one workday per week under the terms of my contract with Sveriges Radio. This means that the greater part of my time will be devoted to psychological process research at Uppsala University.

Other personnel:

Ulf Berg, born 1937, Ph.L. in sociology at Åbo Academy in 1967, permanently employed since the spring of 1969 at the Audience and Programme Research Department of Sveriges Radio.

Publications: Suomenruotsalaiset ja tiedotusvälinet (The Finland-Swedes and mass media). K. Nordenstreng (ed.): Joukkotiedotus ja yleisö (Mass media and the audience), Tapiola 1969.

Research reports: Radio listening and televiewing in Swedish Finland:
Extent and average length of exposure. Oy Yleisradio AB, LSP study, 15/68.

Radio listening and televiewing in Swedish Finland: Exposure among mono-
linguals and bilinguals. Oy Yleisradio AB, LSP study 1/69.

Berg, U. & Starck, M.: On the use of time by the Finland-Swedish audience.
Oy Yleisradio AB, LSP study, 9/68.

Berg, U. & Starck, M.: Reactions of the Finland-Swedish audience to Finnish-
language, Finland-Swedish and Standard Swedish TV programmes. Oy Yleisradio
AB, LSP study, 17/68

Staffan Nilsson, born in 1940, Ph.M. in 1965 with major in education.
Research assistant at the Department of Education, Stockholm University,
1964-1968; employed by the Audience and Programme Research Department of
Sveriges Radio in 1966 to test instructional programmes in connection with
the changeover to right-hand traffic; since July 1, 1969, head of SR/PUB's
Research Section.

Research reports (a partial list):

An experiment with "critical situations" with or without wrong approaches.
Sveriges Radio: PUB, Project No. 36/67

Pretesting of radio and TV programmes. Sveriges Radio: PUB Project Nos.
10/67, 43/67, 54/67, 66/67.

Perception of TV programmes - Factor analysis of programme ratings using
semantic technique. Sveriges Radio: PUB, Project No. 46/68.

Nilsson, S. & Löjdquist, J.: The information drive against narcotics in
the spring of 1969 - A study of its effects. Sveriges Radio: PUB, Project
No. 38/69.

Other members of SR/PUB's staff as well as collaborators will of course
also take part in discussions on various stages of the project and its
execution, in particular Associate Professor Göte Hansson at the Depart-
ment of Psychology, Stockholm University, who is attached to SR/PUB as
research consultant, and Ulla B. Abrahamsson, Ph.M., in her capacity as
coordinator of SR/PUB's research planning.

B U D G E T

<u>Alternative 1</u>	<u>Year 1</u>	<u>Year 2</u>
Salaries (average salary SKr 4.500 per month)		
1 researcher, 1/2-time in year 1	27.000	
1 researcher, 1/3-time in year 2		18.000
Clerks and typists (average salary SKr 2.400 per month)	2.400	2.400
23 % of payroll	6.762	4.692
Travels (B. Höijer: Björklinge - Stockholm)	640	680
Fieldwork (programme perception)	25.800	
Fees to subjects (programme perception)		7.500
Data processing	34.000	22.300
Totals:	96.602	55.572
Grand total:	SKr 152.174	

<u>Alternative 2¹⁾</u>		
Salaries (average salary SKr 4.500 per month)		
1 researcher, 1/2-time in year 1	27.000	
1 researcher, 1/4-time in year 2		13.500
Clerks and typists	2.400	2.400
23 % of payroll	6.762	3.657
Travels (B. Höijer: Björklinge - Stockholm)	640	160
Fieldwork (programme perception)	25.800	
Fees to subjects (programme perception)	.	7.500
Data processing	34.000	13.000
Totals:	96.602	40.217
Grand total:	SKr 136.819	

¹⁾ Excludes prediction of perceptions.

Explanation of certain items in the budget

- Salaries:** The estimated working hours for the persons who will take part in the project have been combined and the payroll is based on the average salary paid to these persons.
- Fieldwork:** See section 4 under "Research methods" above. Included in this item are the costs of sampling, printing the questionnaire, postage, fees to subjects (since their task will be of a quite different scope than is customary in postal inquiries).
- Fees to subjects:** See section 4 under "Research methods" above. The cost is estimated in accordance with the rules in force at SR/PUB for payment of fees to subjects (SKr 25 per person). It is expected that Sveriges Radio will make equipment and experimental materials available for this purpose without charge.
- Data processing:** Most of the costs entered under the sections, "The forecasting model" and "Consumption patterns", will be incurred for data processing (including the continuous updating of basic data). The contemplated analysis would be unfeasible without computer run-through on a large scale.

The sum of SKr 20.000 has therefore been set aside for the forecasting model, SKr 18.000 for mapping out consumption groups and consumption patterns, whereas smaller sums will be required for the field study and laboratory study of programme perception, SKr 4.000 and 5.000 respectively.

Lastly, a forecast of programme perception is estimated to cost SKr 9.300 in data processing.

Scope for pruning the budget

By presenting two budget alternatives we have indicated a way to effect reductions. The item eliminated in alternative 2 is "Forecast of programme perception" (which includes data processing plus some working hours). However, we should like to point out that we are anxious to perform this task as well, the more so since during year 2 we ought to have the required basic data and developed methods for the purpose.

Timetable

Owing to the character of the basic data there is justification for letting the project extend over a fairly long period. For example, we want to be able to control how seasonal variations of programme output and leisure habits react on the normal level and patterns of consumption.

Other grants for the project

Much of the research work carried on at the Audience and Programme Research Department is performed to order from different units of Sveriges Radio and is financed under the programme budget for radio and television. This budget does not accommodate any earmarked appropriations for mass media research. In order to be able to carry out a project of this type, therefore, we are reduced to applying for grants from another source. It is planned to finance the whole of this project out of the grant herein requested.

Copy in extract of minutes kept at meeting of the Board of the Bank of Sweden Tercentenary Fund held on Thursday, June 11, 1970.

In attendance: Mr. Segerstedt (Chairman), Miss Bergegren, Mrs. Sjövall, Messrs. Dahlen, Martinsson and Larsson, Miss Ljungberg, Messrs. Eklöf, Hjelm, Gustafsson, Björk, Mundebo, Grebäck and Wallmark.

§ 6.

In dealing with the following applications the Board reached the decisions set forth in the following list.

No.	Project Director	Project	Decision
70/22	Björn Höijer	The extent and orientation of broad-casting consumption	Grant of SKr 96.000 approved for the period July 1, 1970 - June 30, 1972, together with max. SKr 56.000 for data processing costs.

In fidem

C.-E. Virdebrant

This is a certified true copy in extract:

(signed)
.....

(signed)
.....